

SURGICAL DRAPE AND METHOD OF USE

REFERENCE TO RELATED APPLICATIONS

[0001] The present application is a continuation-in-part of International Application PCT/US03/18255, filed Jun. 10, 2003. The present application claims priority from, and incorporates by reference, the following United States Provisional Patent Applications: Ser. No. 60/386,758 filed Jun. 10, 2002; Ser. No. 60/456,552 filed Mar. 24, 2003; and Ser. No. 60/457,513, filed Mar. 25, 2003.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention.

[0003] The invention relates to surgical drapes and, more particularly, to a surgical drape for protecting a patient and portions of an operating table.

[0004] 2. Description of the Prior Art.

[0005] Currently, after a patient is placed on an operating table in preparation for surgery, the patient must be lifted or otherwise maneuvered in order to position drapes under the patient. This can result in random sterilization or inadequate isolation of certain portions of the patient from the surgical table. Moreover, considerable difficulty in properly positioning the drapes can be experienced. Any time spent in properly positioning the drapes can undesirably increase the amount of time required to perform the surgical procedure.

[0006] Desirably, a surgical drape would be available that would minimize or eliminate difficulties in placing drapes under a patient while isolating the surgical field in a sterile manner. Any such drape hopefully would be easy to use and would permit the surgical procedure to be performed with minimal delay.

SUMMARY OF THE INVENTION

[0007] In response to the foregoing concerns, the present invention provides a new and improved surgical drape. In a first embodiment, the surgical drape according to the invention comprises a first, closed container having a portion that can be selectively opened to form a first opening, the first container being of a size and shape such that a patient can be placed atop the first container when the first container is placed on the upper surface of the operating table. The invention includes a first sheet disposed within the first container, the first sheet having first and second opposed ends, the first end of the first sheet being removable from the first container through the first opening so as to remove a desired portion of the first sheet from the container, the second end of the first sheet remaining within the container.

[0008] Preferably, the first sheet is folded in a plicated (accordion-like) manner for compact disposition within the first container and the first container is laid across a desired portion of the table prior to placing the patient on the table. After the patient has been positioned properly and prepped, the first sheet can be pulled from underneath the patient and pulled out of the first container so that the sheet covers the table in the area of surgical interest and then covers the side or end of the table down to the floor. After the surgical procedure has been completed, the first sheet and the container from which it was pulled can be removed and discarded readily.

[0009] In the preferred embodiment, one surface of the container is provided with one or more adhesive surfaces that will secure the container to the upper surface of the operating table, thereby preventing undesired movement of the container relative to either the table or the patient. Desirably, the adhesive will be exposed by the removal of a non-stick protective layer. Also, the leading edge of the sheet desirably is provided with a pull tab. The sheet can be made of a wide variety of sterilizable materials, typically fluid-impervious, such as polyethylene or vinyl. If desired, the edges of the sheet can be provided with adhesive surfaces, or possibly hook and loop fasteners, in order to secure the edges of the sheet to selected portions of the operating table.

[0010] In a second embodiment, the first embodiment is modified to include a second sheet having first and second opposed ends. Preferably, the second end of the second sheet is connected to the second end of the first sheet disposed within the first container. The first end of the second sheet is movable relative to the second end of the second sheet so as to expose a desired portion of the second sheet. In this embodiment of the invention, a second, closed container is provided. The first sheet, the first container, and the second sheet are disposed within the second container. The second container has a portion that can be selectively opened to permit the contents of the second container to be removed therefrom. It is expected that the second sheet will be provided with adhesive surfaces in order to removably attach the second sheet to the operating table. Preferably, the second sheet is relatively thick and soft, such that it can be disposed over a substantial portion of the operating table in order to provide comfort to the patient as well as to provide protection for the table. Desirably, the second sheet is made of a first ply made of netting material, a second ply made of an adsorbent pulp material, and a third ply made of a fluid-impervious material such as polyethylene or vinyl.

[0011] In a third embodiment, a third sheet is provided. The third sheet can be used with either the first or the second embodiment or even a conventional surgical drape. The third sheet preferably is fluid-impervious and has first and second ends. The second end of the third sheet is connected to a selected one of the first container, the second end of the first sheet, or the second end of the second sheet in the region of the connection between the first container and the second sheet. The first end of the third sheet includes a cut-out portion that permits the third sheet to be fitted about a selected portion of the patient. Preferably, the third sheet is provided with a layer of adhesive about its periphery in order to permit the third sheet to be removably attached to the patient. Desirably, the connection between the third sheet and a selected one of the first container, the first sheet, or the second sheet is severable such that the third sheet can be removed and discarded when desired, such as after initial pre-operative preparation work on the patient has been completed.

[0012] The surgical drape according to the invention is usable with various attachments and devices that commonly are used in conjunction with such drapes. For example, the invention can be used with a conventional pouch-like container made of a lightweight, flexible material, the pouch-like container having a large opening at a first end and a small, selectively openable valve at a second end. The pouch-like container has a layer of adhesive adjacent the